No active tr.

DELPHION









RESEARCH

PROBBETS

ENSIDED ELPHION

Search: Quick/Number Boolean Advanced Der

The Delphion Integrated View: INPADOC Record

Get Now: PDF | File History | Other choices Tools: Add to Work File: Create new Work I View: Jump to: Top Go to: Derwent **⊠** Ema

> KR3052789A: MICROBIAL FUEL CELL FOR SINGLE REACTION TAN ₹Title:

> > TRANSITION METAL-FIXED ELECTRODE

Microbial fuel cell for single reaction tank using transition metal-fixed

electrode [Derwent Record]

KR Republic of Korea

> A Examined Patent Application i

¶Inventor: PARK, DU HYEON: Republic of Korea

SHIN, IN HO; Republic of Korea

E-BIOTECH Republic of Korea

News, Profiles, Stocks and More about this company

2003-06-27 / 2001-12-21 Published / Filed:

> ** €** Application KR2001000082828

Number:

₹ IPC Code: Advanced: H01M 8/16;

Core: more...

IPC-7: H01M 8/16;

FECLA Code: None

Priority Number: 2001-12-21 KR2001000082828

> PURPOSE: A microbial fuel cell for a single reaction tank, using a

transition metal-fixed electrode, is provided, to enable a process for reducing the generation of sludge when applied to the waste water

treatment to be developed, by inhibiting the growth of microorganism and promoting the degradation velocity of substrate by limiting the usage efficiency of microorganism. CONSTITUTION: The microbial fuel cell comprises a negative electrode fixing a transition metal capable of being reduced by the reducing power generated by the metabolism of microorganism; a positive electrode fixing a transition metal capable of being oxidized by oxygen; a reaction tank which contains the negative electrode inside and whose one face is made of the positive electrode, wherein the one side of the positive electrode is contact with air; an electrolyte; and a microorganism catalyst. Preferably the transition metal fixed to the negative electrode is at least one selected from the group consisting of CuO, nickel oxide and tin oxide; and the transition metal fixed to

the positive electrode is at least one selected from the group consisting of Fe2O3, zinc oxide and aluminum oxide. Preferably the

positive and negative electrodes made of graphite.

₹Family: Pub. Date **Publication Filed** Title